

Marking Substances and Security Elements and Method of the
5 Integration Thereof in a Paper Pulp Line as well as Method of Testing

00719891-011001

The invention relates to marking substances and security elements, a method of integrating them into the paper pulp line of documents, securities, bank notes, wrappings and products as well as a testing method. The task of
10 the invention is to propose marking substances which contribute to increasing the certainty against counterfeiting and which can be detected only by testing technology operating with extreme accuracy. In accordance with the invention, the marking substance is fed from a supply vessel by way of output tubes into the paper pulp line or, when producing water marks, to the paper
15 pulp line by transfer rollers by way of embossing segments of an embossing roller. The electrically conductive marking substance is connected as an electrically conductive polymer with a foil of the security element to be included in the paper pulp line. Or it is applied as a liquid application medium to the support material. In accordance with the invention, the marking
20 substance is detected by multiple tests in accordance with its electric conductivity, its physical parameters or chemical properties.